

Merritt Parkway, Cross Highway Bridge
Spanning the Cross Highway at the 23.7 mile mark
on the Merritt Parkway
Fairfield
Fairfield County
Connecticut

HAER No. CT-105

HAER
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD

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HAER No. CT-105

Location: Spanning the Cross Highway at the 23.7 mile mark on the Merritt Parkway in Fairfield, Fairfield County, Connecticut

UTM: 18.640720.4559230
Quad: Westport, Connecticut

Construction Date: 1938

Engineer: Connecticut Highway Department

Architect: George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridges.

Contractor: Mariani Construction Company
New Haven, Connecticut

Present Owner: Connecticut Department of Transportation
Wethersfield, Connecticut

Present Use: Used by traffic on the Merritt Parkway to cross the Cross Highway

Significance: The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge design and the individuality of each structure, makes them distinctive.

Historians: Todd Thibodeau, HABS/HAER Historian
Corinne Smith, HAER Engineer
August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

Fairfield was known as Uncoway or "looking forward to a valley" by the Indians that inhabited this region when Europeans first arrived. In 1637, Roger Ludlow landed at Uncoway and named it Fair Fields. Later that year Ludlow defeated the Pequot Indians in the Great Swamp Fight, ending the Pequot Wars.¹

With the Pequot's demise, Ludlow took immediate steps to obtain a commission from the General Court of Connecticut to begin a new settlement. In 1639, with commission in hand, Ludlow and four others journeyed back to Fair Fields, and acquired land from the local Indians. The original purchase consisted of the present-day communities of Fairfield, Black Rock, Easton, Redding, Weston, and Westport. Three years later, Ludlow convinced Governor Hayes to hold General Court in Fairfield twice a year. Thus, early in its history, Fairfield became a place of unusual importance in the Connecticut colony.²

During the first half of the eighteenth century, trade flourished among Fairfield and other communities on the Atlantic coast. By 1745 Fairfield was the third-largest town in the colony. As it expanded eleven neighborhoods developed: the Beach Area, Tunxis Hill, Stratfield, Grasmere, Greenfield Hill, Mill Plain, Holland Hill, the University area, Southport, Black Rock Turnpike, and the Center. Early Fairfield was primarily an agricultural and trading node, with properties along the original roads developing the quickest. Thus, the Boston Post Road played a prominent role early in town development.³

¹Rita Papazion, Fairfield Connecticut, 350 Years, (Fairfield: Fairfield House, Inc., 1989), 6.

²Papazion, 6.

³George O. Pratt, Fairfield in Connecticut, 1776-1976, (Fairfield: Fairfield Bicentennial Commission, 1976), 5.

On the morning of July 7, 1779, the British set fire to a large section of Fairfield's downtown. It would be several years before the community rebounded from the loss. During the nineteenth century, the municipalities of Redding, Weston, Easton, Westport, and Black Rock split off from Fairfield. The industrialization of Bridgeport and the increased popularity of commuting brought further change to the town's demography. Improved transportation meant that factory workers could live in Fairfield and work in Bridgeport. Between 1900 and 1910, Fairfield's population increased by 50 percent to 6,134, heralding the start of the town's transformation into a suburban community. By 1920, the population almost doubled again to 11,000. Fairfield developed in a conservative manner, though, implementing its first zoning ordinance in the early 1920s.⁴

On to this backdrop the Merritt Parkway was built, and conflict quickly developed. Local residents sought the benefits of increased land values and reduced traffic congestion on the Boston Post Road, but worried about over-development and traffic choking residential areas. Their solution was to allow the parkway to follow a northerly route with few on and off ramps. This group promptly formed the Greenfield Hill Improvement Society. Local business leaders aimed to reduce congestion on the Boston Post Road without losing customers; they wanted the parkway to parallel the Post Road and have several exits throughout the community. Local entrepreneurs rallied around the Fairfield Lion's Club and the Fairfield Businessmen's Association. After several petitions and town meetings Commissioner Cox settled on a compromise; the road would have several interchanges, but exit 43 in Greenfield Hill

⁴Pratt, 21-25.

would not be built.⁵ After the parkway was completed, both groups appeared to be satisfied with the results.

BRIDGE CONSTRUCTION HISTORY

The Cross Highway starts at Main Street in Westport and proceeds north to Redding Road. The design of the Cross Highway bridge had to be altered just prior to construction. In spring 1938 Highway Commissioner John Macdonald and Public Works Administrator Robert Hurley disagreed over whether the bridges of the Merritt Parkway should be wide enough to allow the roadway to pass over or under them without having to narrow the roadway. This became known as the pinched bridge controversy. Governor Cross enlisted the help of the former highway commissioner, Charles Bennett, to settle the dispute. It was decided that three of six bridges about to start construction would be widened by 10', and that all future bridges would be wide enough to prevent convergence underneath them. The three widened bridges were the Wilton Road/Route 33, the Weston Road/Route 57, and the Cross Highway bridges.⁶

Another controversy arose before the Cross Highway Bridge was completed. Local residents from the Greenfield Hill district were opposed to having on and off ramps at this interchange. Businessmen from Fairfield and Westport wanted exits. Commissioner Cox was opposed to an exit at

⁵"Greenfield Hill Residents Oppose New Highway Entrance," Fairfield News, 9 September 1938, p. 1.

"Cox to Visit Fairfield Over Entrance Controversy," Fairfield News, 16 September 1938, p. 1.

"Local Businessmen Want Entrance at Cross Highway or Redding Road," Fairfield News, 13 January 1939, p. 1.

"Lions Club Offering Petitions For Merritt Parkway Approach," Fairfield News, 27 January 1939, p. 1.

⁶"Parkway Bridges Will Be Wider," New Canaan Advertiser, 14 April 1936, p. 1.

this intersection because the Cross Highway is not a state road and would require improvements that the communities were unwilling to pay for. After several petitions and town meetings, it was decided that this interchange would not receive on and off ramps.⁷

The Peter Mitchell Construction Company of Greenwich, CT, received the contract to grade the Merritt Parkway from North Avenue, in Westport, to Congress Street, in Fairfield (ConnDot project #180-56). While the Cross Highway bridge is located within this section of the Merritt, the bridge contract was awarded to the Mariani Construction Company of New Haven, CT (ConnDot project #180-76).⁸ The bridge cost \$38,140 and was under construction from May 13, 1938, through the fall of that year. The paving work for this region of the Merritt extended from Easton Road/Route 136, in Westport, to Congress Street, in Fairfield. This contract was assigned to the A. I. Savin Company of East Hartford, CT (ConnDot project #180-135). The Cross Highway bridge has received little maintenance since it was built. Over the years some spalling concrete was removed and patched.⁹

⁷"Greenfield Hill Residents Oppose New Highway Entrance," Fairfield News, 9 September 1938, p. 1.

"Cox to Visit Fairfield Over Entrance Controversy," Fairfield News, 16 September 1938, p. 1.

"Cox Makes No Decision About Merritt Entrances," Fairfield News, 11 November 1938, p. 1.

"Businessmen Want Entrance at Cross Highway of Redding Road," Fairfield News, 13 January 1939, p. 1.

"Ramp Decision Will Be Left to Town Meeting," Fairfield News, 3 February 1939, p. 1.

⁸Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

⁹Cross Highway Bridge, DOT #734; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

BRIDGE DESCRIPTION

The Cross Highway Bridge is a single-span, reinforced- concrete, barrel-type rigid-frame bridge spanning 36'-5-1/2". Parallel wing walls form the approach for the overpass. The Merritt Parkway travels over the bridge at a skew of 25°-7'-45" on a clear roadway 67'-11" wide.

The rigid-frame design for the Cross Highway Bridge differs from most of the other bridges on the Merritt Parkway because it is shaped like a segmental arch, instead of an arched beam, supported on walls. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid- frame.) The walls, which are the frame legs, are exposed several feet above the roadway. The arch rises 16'-6" from the springline to the crown. The walls are a constant thickness greater than 2'-6, but the arch thins to 1'-3" at the crown. A wall is built as a continuation of the leg to a height almost even with the crown of the arch to balance the backfill. The spandrels of the arch are filled with gravel and bounded by reinforced-concrete walls at the faces.

The massing and rounded corners of the pylons are similar to the Pueblo Revival style of the 1920s and 1930s. The pylons and wing walls step vertically and horizontally, creating large towers on each side of the arch. Near the top of each pylon is a bas-relief resembling a garland of flowers.

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Fairfield News. 1938-1939.

- Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.